

REMARKS

The Office Action mailed June 15, 2006, and made final, has been carefully reviewed and the foregoing amendments have been made as a consequence thereof.

Claims 1-15 are pending in this application. Claims 1-15 stand rejected. Claims 1 and 10 have been amended herein. No new matter has been added.

The rejection of Claims 1-15 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,731,201 to Bailey et al. (hereinafter referred to as “Bailey”) in view of U.S. Patent No. 5,079,688 to Kido (hereinafter referred to as “Kido”) and further in view of U.S. Patent No. 4,471,399 to Udren (hereinafter referred to as “Udren”) is respectfully traversed.

Bailey describes a communication module (300) for an appliance (100) having an appliance controller (201). The communication module includes a power supply (310), a communication protocol translator (320), a power line communication transceiver (330), and a line driver (340). The communication protocol translator translates signals received from a communication media into appliance controller signals and vice versa. Notably, Bailey does not describe or suggest a diagnostic module configured to detect ground faults and power line sag, record power failures, and measure power line frequency, power line voltage and an average power line voltage.

Kido describes a power monitor circuit wherein AC power-line voltage is converted by a DC power supply (20) to regulate DC voltage (Vcc). A rectifier-filter (23) converts the AC voltage to a non-regulated DC voltage. The output of the rectifier-filter rises in quick response to the power-on state and drops in quick response to the significant AC voltage drop. If the output of DC power supply drops below a specified threshold due to AC power-line failure or due to its own failure, a DC low-voltage signal is generated to power controller (21). A latch circuit (26) is energized with the non-regulated DC voltage to latch the DC low-voltage signal if it occurs during the interval between the first and second AC transitory signals and supplies a DC alarm signal to a computer power supply and logic unit (30). Notably, Kido does not describe or suggest a diagnostic module configured to detect ground faults and power line sag, record power failures, and measure a power line frequency,

a power line voltage and an average power line voltage. Rather, Kido describes a power monitor circuit configured to measure only changes in DC voltage and interface with the computer power supply and logic unit. Specifically, Kido does not describe or suggest a diagnostic module configured to measure the frequency, voltage, average voltage, and/or ground faults of the power line, detect power line sag and record power failures.

Udren describes protecting electrical transmission lines and power generating equipment against insulation faults and consequent short circuits by locating faults by detecting abnormal relationships of AC voltages and currents. Notably, Udren does not describe or suggest a diagnostic module configured to detect ground faults and power line sag, record power failures, and measure power line frequency, power line voltage and average power line voltage.

Claim 1 recites a communication and power line diagnostics system comprising "... a diagnostics module configured to diagnose the power line, said diagnostics module comprising a power line measurement connection for coupling said diagnostics module to the power line, said diagnostics module configured to at least one of detect a power line sag, record power failures, measure a power line frequency and measure an average power line voltage."

None of Bailey, Kido and Udren, considered alone or in combination, describes or suggests a communication and power line diagnostics system including a diagnostics module configured to at least one of detect a power line sag, record power failures, measure a power line frequency and measure an average power line voltage, as required by Applicants' claimed invention. Rather, in contrast to the present invention, Bailey describes a communication module adapted to be received by an appliance having an appliance controller. Kido describes a power monitor circuit that measures only changes in direct current voltage and does not measure a plurality of power line parameters. Udren describes locating faults by detecting abnormal relationships of AC voltages and currents. Accordingly, Claim 1 is respectfully submitted to be patentable over Bailey in view of Kido and further in view of Udren.

Claims 2-9 depend from independent Claim 1. When the recitations of Claims 2-9 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-9 likewise are patentable over Bailey in view of Kido and further in view of Udren.

Claim 10 recites a method of communicating data between an appliance and a power line carrier using a communication interface comprising "... diagnosing the power line carrier with a diagnostics module configured to at least one of detect a power line sag, record power failures, measure a power line frequency and measure an average power line voltage, the diagnostics module configured to interface with the power line carrier and the communication interface; ..."

None of Bailey, Kido and Udren, considered alone or in combination, describes or suggests a method of communicating data between an appliance and a power line carrier using a communication interface including "diagnosing the power line carrier with a diagnostics module configured to at least one of detect a power line sag, record power failures, measure a power line frequency and measure an average power line voltage, the diagnostics module configured to interface with the power line carrier and the communication interface," as required by Applicants' claimed invention. Rather, in contrast to the present invention, Bailey describes a communication module adapted to be received by an appliance having an appliance controller. Kido describes a power monitor circuit that measures only direct current voltage and does not measure a plurality of power line carrier parameters and/or interface with a power line carrier and a communication interface. Udren describes locating faults by detecting abnormal relationships of AC voltages and currents. Accordingly, Claim 10 is respectfully submitted to be patentable over Bailey in view of Kido and further in view of Udren.

Claims 11-15 depend from independent Claim 10. When the recitations of Claims 11-15 are considered in combination with the recitations of Claim 10, Applicants respectfully submit that dependent Claims 11-15 likewise are patentable over Bailey in view of Kido and further in view of Udren.

Moreover, Applicants respectfully submit that the Section 103 rejection of presently pending Claims 1-15 is not a proper rejection. Obviousness cannot be established by merely

suggesting that it would have been obvious to one of ordinary skill in the art to combine Bailey with Kido and Udren. More specifically, it is respectfully submitted that a prima facie case of obviousness has not been established. As explained by the Federal Circuit, “to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the Applicant.” In re Kotzab, 54 USPQ2d 1308, 1316 (Fed. Cir. 2000). MPEP 2143.01.

As is well established, the mere fact that the prior art structure could be modified does not make such a modification obvious unless the prior art suggests the desirability of doing so. See In re Gordon, 221 U.S.P.Q.2d 1125 (Fed. Cir. 1984). The Federal Circuit has determined that:

[I]t is impermissible to use the claimed invention as an instruction manual or “template” to piece together the teachings of the prior art so that the claimed invention is rendered obvious. This court has previously stated that “[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.”

In re Fitch, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992). Further, under Section 103, “it is impermissible ... to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.” In re Wesslau, 147 USPQ 391, 393 (CCPA 1965). Rather, there must be some suggestion, outside of Applicants’ disclosure, in the prior art to combine such references, and a reasonable expectation of success must be both found in the prior art, and not based on Applicants’ disclosure. In re Vaeck, 20 U.S.P.Q.2d 1436 (Fed. Cir. 1991). In the present case, neither a suggestion nor motivation to combine the cited art, or any reasonable expectation of success has been shown.

Accordingly, since there is no teaching or suggestion in the cited art for the claimed combination, the Section 103 rejection appears to be based on a hindsight reconstruction in which isolated disclosures have been picked and chosen in an attempt to deprecate the present

invention. Of course, such a combination is impermissible, and for this reason alone, Applicants request that the Section 103 rejection of Claims 1-15 be withdrawn.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 1-15 be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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